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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/766,147	01/19/2001	Kimmo Ruotoistenmaki	297P010068-US(PAR)	1285

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EXAMINER

WILSON, ROBERT W

ART UNIT

PAPER NUMBER

2661

DATE MAILED: 07/23/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/766,147

Applicant(s)

RUOTOISTENMAKI, KIMMO

Examiner

Robert W Wilson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☒ Claim(s) 1-24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4-6.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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### DETAILED ACTION

**1.0** The application of Kimmo Ruotoistenmaki for a "USER INTEFACE FOR A MOBILE STATION" filed 01/19/2001 which claims benefit of 60/259,122 dated 12/29/2000 has been examined. Claims 1-24 are pending.

#### *Drawings*

**2.0** The drawings in this application are objected to by the Draftsperson as informal. Any drawing corrections requested, but not made in the prior application should be repeated in this application if such changes are still desired. If the drawings were changed and approved during the prosecution of the prior application, a petition may be filed under 37 CFR 1.182 requesting the transfer of such drawings, provided the parent application has been abandoned. However, a copy of the drawings as originally filed must be included in the 37 CFR 1.60 application papers to indicate the original content.

#### *Claim Rejections - 35 USC § 103*

**3.0** The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**4.0** **Claims 1-24** are rejected under 35 U.S.C. 103(a) as being obvious over Yarlagadda (U.S. Patent No.: 6,556,563)

Referring to **Claim 1**, Yarlagadda teaches: A method for providing a user interface of a mobile station that connects to a communication system (Figure 1) characterized in that

- conversion is made between acoustic and electric speech signal in the mobile station (The mobile per Fig 1 creates PCM which is utilized by VC or 110 per Fig 1 to convert the speech to VoIP per col. 2 line 56-63)
- speech signals are transferred between the mobile station and the communication system (The VC or 110 per Fig 1 converts the PCM to VoIP so that the speech can be transferred between the mobile and the communication system per col. 2 line 56-63)

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- information is converted between speech and a second form of information wherein the conversion between speech and the second form of information is made at least in part in the communication system (TTS or 106 per Fig 1)

Yarlagadda does not expressly call for: conversion is made between acoustic and electric speech signal in the mobile station but teaches mobile per Fig 1 and conversion of PCM to VoIP by VC or 110 per Fig 1 and per col. 2 line 56-63

It would have been obvious to one of ordinary skill in the art at the time of the invention that the mobile performs conversion is made between acoustic to electric speech signal in the mobile station in order for PCM to be present for conversion to PCM in the VC or 110 per Fig 1.

**In Addition Yarlagadda teaches:**

Regarding **Claim 2**, characterized in that substantially all user interface functions of the mobile are made using said user interface (All of the user interface functions in the mobile utilize 104 106, 108, & 110 per Fig 1 which are substantially available)

Regarding **Claim 3**, characterized in that the second form of information is text or graphics (text per 106 of Fig 1)

Regarding **Claim 4**, characterized in that automatic speech recognition is used (ASR or 108 per Fig 1)

Regarding **Claim 5**, characterized in that distributed speech recognition is used (The applicant broadly claims "distributed speech recognition". The examiner interprets "distributed speech recognition" as deployment of ASR or 108 per Fig 1 at many locations around the network. It would have been obvious to one of ordinary skill in the art at the time of the invention to deploy ASR at many locations around the network in order for the network to scale to a larger application. It would have been obvious to one of ordinary skill in the art at the time of the invention that distribution of ASR around the network performs the same function as DSR)

Regarding **Claim 6**, characterized in that Voice over Internet Protocols are used in the user interface communication between the mobile station and the communication system (102 per Fig 1)

Regarding **Claim 7**, characterized in that user interface communication between the mobile station and the communication system is substantially continuously available for providing the user interface, when the mobile is able to communicate with a base station of the communication system (All of the user interface functions in the mobile utilize 104 106, 108, & 110 per Fig 1 which are substantially continuously available)

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Regarding **Claim 8**, characterized in that said information in the second form is transferred within the communication system (text is transferred in the communication system and converted in TTS or 106 per Fig 1)

Referring to **Claim 9**, Yarlagadda teaches: A user interface of a mobile station of a communication system, (Figure 1) characterized in that the user interface comprises:

- means for conversion between acoustic and electric speech signal in the mobile station (The mobile per Fig 1 has the means to convert from acoustic to PCM because PCM is utilized convert to VoIP by VC or 110 per Fig 1 and per col. 2 line 56-63)
- means for transferring speech signals or derivative signals thereof between the mobile station and the communication system (The VC or 110 per Fig 1 converts the PCM to VoIP so that the speech can be transferred between the mobile and the communication system and TTS or 106 per Fig 1 converts text to speech wherein text is transferred between the mobile and the communication system per col. 2 line 40-67 or means)
- means of converting between speech and the second form of information are provided at least in part in the communication system (TTS or 106 per Fig 1 or means)

Yarlagadda does not expressly call for: means of conversion is made between acoustic and electric speech signal in the mobile station but teaches mobile per Fig 1 and conversion of PCM to VoIP by VC or 110 per Fig 1 and per col. 2 line 56-63

It would have been obvious to one of ordinary skill in the art at the time of the invention that the mobile performs conversion is made between acoustic to electric speech signal in the mobile station in order for PCM to be present for conversion from PCM to VoIP in the VC or 110 per Fig 1.

**In Addition Yarlagadda teaches:**

Regarding **Claim 10**, characterized in that substantially all user interface functions of the mobile are made using said user interface (All of the user interface functions in the mobile utilize 104, 106, 108, & 110 per Fig 1 which are substantially available)

Regarding **Claim 11**, characterized in that the second form of information is text or graphics (text per 106 of Fig 1)

Regarding **Claim 12**, characterized in that automatic speech recognition is used (ASR or 108 per Fig 1)

Regarding **Claim 13**, characterized in that distributed speech recognition is used (The applicant broadly claims "distributed speech recognition". The examiner interprets "distributed speech

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recognition” as deployment of ASR or 108 per Fig 1 at many locations around the network. It would have been obvious to one of ordinary skill in the art at the time of the invention to deploy ASR at many locations around the network in order for the network to scale to a larger application. It would have been obvious to one of ordinary skill in the art at the time of the invention that distribution of ASR around the network performs the same function as DSR)

Regarding **Claim 14**, characterized in that Voice over Internet Protocols are used in the user interface communication between the mobile station and the communication system (102 per Fig 1)

Regarding **Claim 15**, characterized in that it comprises means for providing user interface communication between the mobile station and the communication system is substantially continuously available for providing the user interface, when the mobile is able to communicate with a base station of the communication system (All of the user interface functions in the mobile utilize 104 106, 108, & 110 per Fig 1 which are substantially continuously available or means)

Regarding **Claim 16**, characterized in that it comprises means for transmitting/receiving said information in the second form to/from other part of the communication system (text is transferred in the communication system and converted in TTS or 106 per Fig 1)

Referring to **Claim 17**, Yarlagadda teaches: A network element for providing an interface between a mobile station and a communication system (Figure 1) characterized in that for providing a user interface of the mobile station it comprises:

- means for transmitting/receiving speech signals or derivative signals thereof to/from the mobile (104 & 110 provide means for speech . 104 and 106 provide means for text per Fig 1)
- means for converting between speech or derivative thereof and a second form of information (106 per Fig 1)

Yarlagadda does not expressly call for: means for converting between speech or derivative thereof and a second form of information but teaches Text to Speech or 106 per Fig 1.

It would have been obvious to one of ordinary skill in the art at the time of the invention that converting between speech or text and vice versa performs the same function as converting between speech or derivative thereof and a second form of information.

**In Addition Yarlagadda teaches:**

Regarding **Claim 18**, characterized in that it comprises means for transmitting/receiving said information in the second form to/from other part of the communication system (text is transferred in the communication system and converted in TTS or 106 per Fig 1)

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Regarding **Claim 19**, characterized in that it comprises means for using Voice over Internet Protocols are used in the user interface communication between the mobile station and the communication system (102 per Fig 1)

Regarding **Claim 20**, characterized in that it comprises a user database and/or an application database (The primary reference teaches ASR or 108 per Fig 1 which performs voice browser functions per col. 4 lines 1-5. The examiner takes official notice that usage of a database with a voice browser is well known in the art U.S. Patent No.: 6,662,163 col. 4 lines 11-38. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a database in conjunction with a voice browser)

Regarding **Claim 21**, characterized in that it comprises a voice browser (The primary reference teaches ASR or 108 per Fig 1 which performs voice browser functions per col. 4 lines 1-5.)

Referring to **Claim 22**, Yarlagadda teaches: A mobile station, which connects to a communication system (Figure 1) characterized in for providing a user interface of the mobile station it comprises:

- means for converting speech signals between acoustic and electric forms (The mobile per Fig 1 has the means to convert from acoustic to PCM and vice versa because PCM is utilized convert to VoIP by VC or 110 per Fig 1 and per col. 2 line 56-63)
- means for transmitting/receiving speech signals or derivative signals thereof to/from the communication system for processing in the signals in the communication system in order to provide a user interface for the mobile station (Fig 1 has the means for transmitting and receiving speech signals and text or derivative signals to the communication system)

Yarlagadda does not expressly call for: means for converting speech signals between acoustic and electric forms but teaches mobile per Fig 1 and conversion of PCM to VoIP by VC or 110 per Fig 1 and per col. 2 line 56-63

It would have been obvious to one of ordinary skill in the art at the time of the invention that the mobile performs conversion is made between acoustic to electric speech signal in the mobile station in order for PCM to be present for conversion from PCM to VoIP in the VC or 110 per Fig 1.

**In Addition Yarlagadda teaches:**

Regarding **Claim 23**, characterized in that it comprises means for transmitting/receiving speech signal or derivative signals thereof t/from the communication system using Voice over Internet providing the user interface of the mobile station (Fig 1)

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Regarding **Claim 24**, characterized in that the user interface provides for substantially all user interface functions of the mobile (All of the user interface functions in the mobile utilize 104 106, 108, & 110 per Fig 1 which are substantially available)

***Claim Rejections - 35 USC § 112***

**5.0** The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 2, 7, 10, 15-24** are rejected relative to 112/2<sup>nd</sup> paragraph because the metes and bounds of the claims cannot be assessed.

In General:

The specification defines the user interface is purely speech oriented per Pg 5 lines 20-30 but not define the bounds of the limitation of “substantially all” or “substantially continuously”

Referring to **Claim 2**, What is meant by “substantially all”?

Referring to **Claim 7**, What is meant by “substantially continuously”?

Referring to **Claim 10**, What is meant by “substantially all”?

Referring to **Claim 15**, What is meant by “substantially continuously”?

Referring to **Claim 16**, What is meant by “transmitting/receiving”?

Referring to **Claim 17**, What is meant by “to/from” and “transmitting/receiving”?

Referring to **Claim 20**, What is meant by “and/or”?

Referring to **Claim 22**, What is meant by “to/from”?

Referring to **Claim 23**, What is meant by “transmitting/receiving”?

Referring to **Claim 24**, What is meant by “substantially all”?

***Claim Objections***

**6.0** **Claims 1-24** are objected to because of the following informalities: The examiner objects to usage of dashes to indicate subordinate limitations in the independent Claims 19, 17, & 22. The examiner recommends deletion of the dashes and the addition of punctuation to delineate the claims. Appropriate correction is required.

***Conclusion***

**7.0** The following reference should be noted but was not utilized in the rejection:




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Kennedy et. al. (U.S. Patent No. : 6,377,825) discloses a wireless phone which performs text to speech and voice recognition.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W Wilson whose telephone number is 703/305-4102. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

  
Robert W Wilson  
Examiner  
Art Unit 2661

RWW  
July 15, 2004

  
[RECEIVED]  
JUL 16 2004